



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

November 8, 2016

J. Robert Shamblin, President  
The DYCHO Company, Inc.  
412 Meridian Street  
Niota, TN 37826

Subject: Label and CSF Amendment – Addition of alternative CSF and directions for use  
Product Name: Sodium Hypochlorite 12.5  
EPA Registration Number: 34750-20001  
Application Date: August 9, 2016  
Decision Number: 521605

Dear Mr. Shamblin:

The amended label and CSFs referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/22/1992
- Alternate CSF 1 dated 08/09/2016

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false

or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Srinivas Gowda by phone at 703-308-6354, or via email at [gowda.srinivas@epa.gov](mailto:gowda.srinivas@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'DF', with a long horizontal stroke extending to the right.

Demson Fuller, Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

Enclosure

# SODIUM HYPOCHLORITE-- 12.5

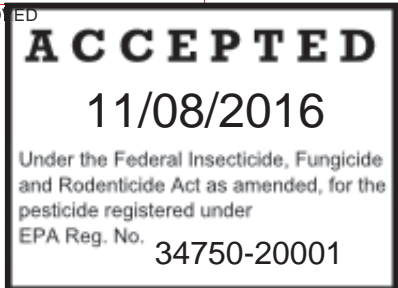
<b>KEEP OUT OF REACH OF CHILDREN</b>	
<b>DANGER</b>	
<b>FIRST AID</b>	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>- Have person sip a glass of water if able to swallow.</li> <li>- Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>- Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>- Take off contaminated clothing.</li> <li>- Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>- Call poison control center or doctor for treatment advice</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>- Move person to fresh air.</li> <li>- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>- Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>- Call a poison control center or doctor for treatment advice.</li> </ul>
<p>Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison control center or Doctor, or going for treatment</p> <p><b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage. See side/back panel for additional precautionary labeling.</p>	
<p><b>PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS</b></p> <p><b>DANGER:</b> Corrosive. Causes eye damage. Causes severe skin irritation or chemical burns. May cause respiratory irritation. Wear safety glasses or goggles and rubber gloves when handling product Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet Remove and wash contaminated clothing before reuse. Harmful if absorbed through skin. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.</p> <p style="text-align: center;"><b>ENVIRONMENTAL HAZARDS</b></p> <p>This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, pools, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA</p> <p style="text-align: center;"><b>PHYSICAL &amp; CHEMICAL HAZARDS</b></p> <p><b>STRONG OXIDIZING AGENT:</b> Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc. or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs, and mucous membranes.</p>	



EPA Reg. No.34750-20001/EPA Est.No.34750-TN-1 USDA APPROVED

**THE DYCHO COMPANY, INC.**

NIOTA, TENNESSEE 37826 423-568-2112



**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**LAUNDRY SANITIZERS**

**-Household laundry Sanitizers**

**IN SOAKING SUDS** - Thoroughly mix 2 oz. of this product to 10 gallons of wash water to provide 200 ppm available chlorine. Wait 5 minutes, and then add soap or detergent. Immerse laundry for at least 11 minutes prior starting the wash/rinse cycle.

**IN WASHING SUDS** - Thoroughly mix 2 oz. of this product to 10 gallons of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent and start the wash/rinse cycle.

**-Commercial Laundry Sanitizers**

Wet fabrics or clothes should be spun dry prior to sanitation. Thoroughly mix 2 oz. of this product with 10 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

**SWIMMING POOL WATER DISINFECTION**

Adjust and maintain the pool water pH to 7.2-7.6 range, add manually or by a feeder device 11 oz. of this product for each 10,000 gallons of water to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Every seven days, or as necessary, super chlorinate the pool with 52 to 104 oz. of product for

each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not reenter pool until the chlorine residual is between 1.0 to 4.0 ppm.

#### **SPAS, HOT-TUBS, IMMERSION TANKS, ETC.**

**-SPAS/HOT-TUBS** - Apply 5 oz. of product per 1,000 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.8. Some oils, lotions, fragrances, cleaners, etc. May cause foaming or cloudy water as well as reduce the efficiency of the product.

To maintain the water, apply 5 oz. of product per 1,000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. After each use, shock treat with 8 oz. of this product per 500 gallons of water to control odor and algae. During extended periods of disuse, add 3 oz. of product daily per 1,000 gallons of water to maintain a 3 ppm chlorine concentration.

**-HUBBARD AND IMMERSION TANKS** - Add 5 oz. of this product per 200 gallons of water before patient use to obtain a chlorine residual of 25ppm, as determined by a suitable test kit. Adjust and maintain the water pH to between 7.2 and 7.6. After each use drain the tank. Add 5 oz. to a bucket of water and circulate this solution through the agitator of the tank for 15 minutes and then rinse out the solution. Clean tank thoroughly and dry with clean cloths.

**-HYDROTHERAPY TANKS** - Add 1 oz. of this product per 1,000 of water to obtain a chlorine residual of 1ppm, as determined by a suitable chlorine test kit. Pool should not be entered until the chlorine residual is below 3 ppm. Adjust and maintain the water pH to between 7.2 and 7.6. Operate pool filter continuously. Drain pool weekly, and clean before refilling.

#### **SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES**

**-RINSE METHOD** - A solution of 100ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50ppm. Prepare a 100ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. of this product with 10 gallons of water to provide approximately 200ppm available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains less than 50ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to re-establish a 200ppm residual.

Do not rinse equipment with water after treatment and do not soak equipment overnight.

Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.

**-IMMERSION METHOD** - A solution of 100ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50ppm. Prepare a 100ppm sanitizing solution by thoroughly mixing 1 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. of this product with 10 gallons of water to provide approximately 200ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. If solution contains less than 50ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to re-establish a 200ppm residual. Do not rinse equipment with water after treatment. Sanitizers used in automatic systems may be used for general cleaning but may not be re-used for sanitizing purposes.

**-FLOW/PRESSURE METHOD** - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 2 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine tests kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50ppm available chlorine.

**-CLEAN-IN-PLACE METHOD** - Thoroughly clean equipment after use. Prepare a volume of a 200ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 2 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50ppm available chlorine. Rinse system with potable water prior to use.

#### **SANITIZATION OF POROUS FOOD CONTACT SURFACES**

**-RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 6 oz. of this product with 10 gallons of water to provide approximately 600ppm available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Rinse equipment with water after treatment and do not soak equipment overnight.

**-IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 6 oz. of this product with 10 gallons of water to provide approximately 600ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Rinse equipment with water after treatment.

#### **SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES**

**-RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 2 oz. of this product with 10 gallons of water to provide approximately 200ppm available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes.

Do not rinse equipment with water after treatment and do not soak equipment overnight.

**-IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 2 OZ. of this product with 10 gallons of water to provide approximately 200ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain.

Do not rinse equipment with water after treatment.

### **SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES**

**-RINSE METHOD** - Prepare a sanitizing solution by thoroughly mixing 6 oz. of this product with 10 gallons of water to provide approximately 600ppm available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**-IMMERSION METHOD** - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 6 oz. of this product with 10 gallons of water to provide approximately 600ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

### **DISINFECTION OF NONPOROUS NON-FOOD CONTACT SURFACES**

**-RINSE METHOD** - Prepare a disinfecting solution by thoroughly mixing 6 oz. of this product with 10 gallons of water to provide approximately 600ppm available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the disinfecting solution, maintaining contact with the solution for at least 10 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

**-IMMERSION METHOD** - Prepare a disinfecting solution by thoroughly mixing, in an immersion tank, 6 oz. of this product with 10 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the disinfecting solution for at least 10 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

### **PUBLIC WATER SYSTEMS**

**-RESERVOIRS- ALGAE CONTROL:** Hypo chlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

**-MAINS** - Thoroughly flush section to be sanitized by discharging from hydrants. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypo chlorinator. Stop water flow when a chlorine residual test of 50ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

**-NEW TANKS, BASINS, ETC.** - Remove all physical soil from surfaces. Place 20 oz. of this product for each 5 cubic feet of working capacity (500 ppm available chlorine). Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to service.

**-NEW FILTER SAND** - Apply 80 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

**-NEW WELLS** - Flush the casing with a 50ppm available chlorine solution of water containing 5 oz. of this product for each 100 gallons of water. The solution should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for several hours or overnight under chlorination. It may then be pumped until a representative raw water sample is obtained. Bacterial examination of the water will indicate whether further treatment is necessary.

**-EXISTING EQUIPMENT** - Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by placing 21 oz. of this product for each 5 cubic feet capacity (approximately 500ppm available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing 5 oz. of this product for each 5 gallons of water (approximately 1000ppm. available chlorine). After drying, flush with water and return to service.

### **EMERGENCY DISINFECTION AFTER FLOODS**

**-WELLS** - Thoroughly flush contaminated casing with a 500ppm available chlorine solution. Prepare this solution by mixing 5 oz. of this product with 10 gallons of water: Backwash the well to increase yield and reduce turbidity, adding sufficient chlorinating solution to be backwash to produce 10 ppm available chlorine residual, as determined by a chlorine test kit. After the turbidity has been reduced and the casing has been treated, add sufficient chlorinating solution to produce 50ppm available chlorine residual. Agitate the well water for several hours and take a representative water sample: Retreat well if water samples are biologically unacceptable.

**-RESERVOIRS** - In case of contamination by overflowing streams, establish hypo chlorinating stations upstream of the reservoir. Chlorinate the inlet water until the entire reservoir obtains 0.2 ppm available chlorine residual, as determined by a suitable chlorine test kit. In case of contamination from surface drainage, apply sufficient product directly to the reservoir to obtain 0.2 ppm available chlorine residual in all parts of the reservoir.

**-BASINS, TANKS, FLUMES, ETC.** - Thoroughly clean all equipment, then apply 20 oz. of product per 5 cu. ft. of water to obtain 500 ppm available chlorine, as determined by a suitable test kit. After 24 hours drain, flush, and return to service. If the previous method is not suitable, spray or flush the equipment with a solution containing 5 oz. of this product for each 5 gallons of water (1000ppm available chlorine). Allow to stand for 2 to 4 hours, flush and return to service.

**-FILTERS** - When the sand filter needs replacement, apply 80 oz. of this product for each 150 to 200 cubic feet of sand. When the filter is severely contaminated, additional product should be distributed over the surface at the rate of 80 oz. per 20 sq. ft. Water should stand at a depth of 1 ft. above the surface of the filter bed for 4 to 24 hours. When filter beds can be backwashed of mud and silt, apply 80 oz. of this product per each 50 sq. ft., allowing the water to stand at a depth of 1 foot above the filter sand. After 30 minutes, drain water to the level of the filter. After 4 to 6 hours drain, and proceed with normal backwashing.

**-DISTRIBUTION SYSTEM** - Flush repaired or replaced section with water. Establish a hypo chlorinating station and apply sufficient product until a consistent available chlorine residual of at least 10 ppm remains after a 24 hour retention time. Use a chlorine test kit.

### **EMERGENCY DISINFECTION AFTER FIRES**

**-CROSS CONNECTIONS OR EMERGENCY CONNECTIONS** - Hypo chlorination or gravity feed equipment should be set up near the intake of the untreated water supply. Apply sufficient product to give a chlorine residual of at least 0.1 to 0.2ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit.



### EMERGENCY DISINFECTION AFTER DROUGHTS

**-SUPPLEMENTARY WATER SUPPLIES** - Gravity or mechanical hypochlorite feeders should be set up on a supplementary line to dose the water to a minimum chlorine residual of 0.2ppm after a 20 minute contact time. Use a chlorine test kit.

**-WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC.** - Thoroughly clean all containers and equipment. Spray a 500ppm available chlorine solution and rinse with potable water after 5 minutes. This solution is made by mixing 5 oz. of this product for each 10 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.2ppm chlorine residual. Use a chlorine test kit.

### EMERGENCY DISINFECTION AFTER MAIN BREAKS

**-MAINS** - Before assembly of the repaired section, flush out mud and soil. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypo chlorinator. Stop water flow when a chlorine residual test of 50ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

### SEWAGE & WASTEWATER TREATMENT

**-EFFLUENT SLIME CONTROL** - Apply a 100 to 1,000ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 10 to 100 oz. of this product with 100 gallons of water. Once control is evident, apply a 15ppm available chlorine solution. Prepare this solution by mixing 3 oz. of this product with 100 gallons of water.

**-FILTER BEDS - SLIME CONTROL:** Remove filter from service, drain to a depth of 1 ft. above filter sand, and add 80 oz. of product per 20 sq. ft. evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

### SEWAGE & WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction. On the average, satisfactory disinfection of secondary wastewater *effluent* can be obtained when the chlorine residual is 0.5ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacteria kill must be emphasized. The MPN of the *effluent*, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the *effluent*. The following are critical factors affecting wastewater disinfection.

1. **Mixing:** It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. **Contacting:** Upon flash mixing, the flow through the system must be maintained.
3. **Dosage/Residual Control:** Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5ppm after 15 minutes contact time.

### DISINFECTION OF DRINKING WATER

**-PUBLIC SYSTEMS:** Mix a ratio of 1 oz. of this product to 100 gallons of water. Begin feeding this solution with a hypo chlorinator until free available chlorine residual of at least 0.2ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

**-INDIVIDUAL SYSTEMS: DUG WELLS** - Upon completion of the casing (lining) wash the interior of the casing (lining) with a 100ppm available chlorine solution using a stiff brush. This solution can be made by thoroughly mixing 1 oz. of this product into 10 gallons of water. After covering the well, pour the sanitizing solution into the well through both the pipe sleeve opening and the pipeline. Wash the exterior of the pump cylinder also with the sanitizing solution. Start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Consult your local Health Department for further details.

**-INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVEN & BORED WELLS** - Run pump until water is as free from turbidity as possible. Pour a 100ppm available chlorine sanitizing solution into the well. This solution can be made by thoroughly mixing 1 oz. of this product into 10 gallons of water. Add 5 to 10 gallons of clean, chlorinated water to the well in order to force the sanitizer into the rock formation. Wash the exterior of pump cylinder with the sanitizer. Drop pipeline into well, start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours, flush well until all traces of chlorine have been removed from the water. Deep wells with high water levels may necessitate the use of special methods for introduction of the sanitizer into the well. Consult your local Health Department for further details.

**-INDIVIDUAL WATER SYSTEMS: FLOWING ARTESIAN WELLS** - Artesian wells generally do not require disinfection. If analysis indicates persistent contamination, the well should be disinfected. Consult your local Health Department for further details.

**-EMERGENCY DISINFECTION** - When boiling of water for 1 minute is not practical, water can be made potable by using this product. Prior to addition of the sanitizer, remove all suspended material by filtration or by allowing it to settle to the bottom. Decant the clarified, contaminated water to a clean container and add 1 drop of this product to 20 gallons of water. Allow the treated water to stand for 30 minutes. Properly treated water should have a slight chlorine odor, if not, repeat dosage and allow the water to stand an additional 15 minutes. The treated water can then be made palatable by pouring it between clean containers for several times.

### FARM PREMISES

Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities occupied or transverse by animals or poultry. Empty all troughs, racks and

other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a solution of at least 1,000ppm available chlorine for a period of 10 minutes. A 1,000ppm solution can be made by thoroughly mixing 11 oz. of this product with 10 gallons of water. Immerse all halters, ropes and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains and waterers must be rinsed with potable water before reuse.

#### **AGRICULTURAL USES**

**-POST-HARVEST PROTECTION.** - Potatoes can be sanitized after cleaning and prior to storage by spraying with a sanitizing solution at a level of 1 gallon of sanitizing solution per tons of potatoes. Thoroughly mix 1 oz. of this product to 2 gallons of water to obtain 500ppm available chlorine.

**-LEAF CUTTING BEE CELLS & BEE BOARDS** - Disinfect leaf cutting bee cells and bee boards by immersion in a solution containing 1ppm available chlorine for 3 minutes. Allow cells to drain for 2 minutes and dry 4 to 5 hours or until no chlorine odor can be detected. This solution is made by thoroughly mixing 1 tsp. of this product per 100 gallons of water. The bee domicile is disinfected by spraying 0.1ppm solution until all surfaces are thoroughly wet. Allow domicile to dry until all chlorine odor has dissipated.

**-FOOD EGG SANITIZATION** – Thoroughly clean all eggs. Thoroughly mix 2 oz. of this product in 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

**-FRUIT & VEGETABLE WASHING** - Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 5 oz. of this product in 200 gallons of water to make a sanitizing solution of 25ppm available chlorine. After draining the tank, submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. *Spray* rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

#### **AQUACULTURAL USES**

**-FISH PONDS** - Remove fish from ponds prior to treatment. Thoroughly mix 103 oz. of this product to 10,000 gallons of water to obtain 10ppm available chlorine. Add more product to the water if the available chlorine level is below 1ppm after 5 minutes. Return fish to pond after the available chlorine level reaches zero.

**-FISH POND EQUIPMENT** - Thoroughly clean all equipment prior to treatment. Thoroughly mix 2 oz. of this product to 10 gallons of water to obtain 200ppm available chlorine. Porous equipment should soak for one hour.

**-MAINE LOBSTER PONDS** - Remove lobsters, seaweed, etc., from ponds prior to treatment. Drain the pond. Thoroughly mix 6,200 oz. of this product to, 10,000 gallons of water to obtain at least 600ppm available chlorine. Apply so that all barrows, gates, rock and dam are treated with product. Permit high tide to fill the pond and then close gates. Allow water to stand for 2 to 3 days until the available chlorine level reaches zero. Open gates and allow 2 tidal cycles to flush the pond before returning lobsters to pond.

**-CONDITIONING LIVE OYSTERS** - Thoroughly mix 5 oz. of this product to 10,000 gallon~ of water at 50 to 70° to obtain 0.5ppm available chlorine. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05ppm. Repeat entire process if the available chlorine level drops below 0.05ppm or the temperature falls below 50°F.

**-CONTROL OF SCAVENGERS IN FISH HATCHERY PONDS** - Prepare a solution containing 200ppm of available chlorine by mixing 2 oz. of product with 10 gallons of water. Pour into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to 0ppm, as determined by a test kit.

#### **PULP AND PAPER MILL PROCESS WATER SYSTEMS**

**-SLUG FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 52 to 104 OZ. of this product per 10,000 gallons of water in the system to obtain from 5 to 10ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1ppm. Badly fouled systems must be cleaned before treatment is begun.

**-INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeable fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10ppm available chlorine. Apply half, (or 1/3, 1/4, or 1/5) of this initial dose when half, (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 11 oz.: of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half, (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

**-CONTINUOUS FEED METHOD** -Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1ppm residual. Badly fouled systems must be cleaned before treatment is begun.

#### **COOLING TOWER/EVAPORATIVE CONDENSER WATER**

**-SLUG FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10ppm available chlorine. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

**-INTERMITTENT FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10ppm available chlorine. Apply half, (or 1/3, 1/4, or 1/5), of this initial dose when half, (or 1/3, 1/4, or 1/5), of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system to obtain a 1ppm residual. Apply half, (or 1/3, 1/4, or 1/5), of this initial dose when half, (or 1/3, 1/4, or 1/5), of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

**-CONTINUOUS FEED METHOD** - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1ppm residual. Badly fouled systems must be cleaned before treatment is begun.

### ASPHALT OR WOOD ROOFS AND SIDINGS

To control fungus and mildew, first remove all physical soil by brushing and hosing with clean water, and apply a 5,000ppm available chlorine solution. Mix 5 oz. of this product per gallon of water and brush or spray roof or siding. After 30 minutes, rinse by hosing with clean water.

### SANITIZATION OF DIALYSIS MACHINES

Flush equipment thoroughly with water prior to using this product. Thoroughly mix 6 oz. of this product to 10 gallons of water to obtain at least 600ppm available chlorine. Immediately use this product in the hemodialysate system allowing for a minimum contact time of 15 minutes at 20°C. Drain system of the sanitizing solution and thoroughly rinse with water. Discard and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to insure that no available chlorine remains in the system. This product is recommended for decontaminating single and multi-patient hemodialysate systems. This product has been shown to be an effective disinfectant, (virucide, fungicide, bactericide, pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysate delivery systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganism to acceptable levels when used as directed. This product should be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT recommended for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysate systems which are available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021.

### BOAT BOTTOMS

To control slime on boat bottoms, sling a plastic tarp under boat, retaining enough water to cover the fouled bottom area, but not allowing water to enter enclosed area. This envelope should contain approximately 500 gallons of water for a fourteen foot boat. Add 18 oz. of this product to this water to obtain a 35ppm available chlorine concentration. Leave immersed for 8 to 12 hours. Repeat if necessary. Do not discharge the solution until the free chlorine level has dropped to 0ppm, as determined by a swimming pool test kit.

### ARTIFICIAL SAND BEACHES

To sanitize the sand, spray a 500ppm available chlorine solution containing 5 oz. of this product per 10 gallons of water at frequent intervals. Small areas can be sprinkled with a watering can.

TABLE OF PROPORTIONS / NOTE: This product degrades with age. Use chlorine test kit and increase dosage, as necessary to obtain the required level of available chlorine.

2ppm	3ppm	10ppm	50ppm
1oz/500gal	3oz/1000gal	5oz/500gal	1oz/20gal
100ppm	200ppm	500ppm	1000ppm
1oz/10gal	2oz/10gal	5oz/10gal	10oz/10gal

### STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage, disposal, or cleaning of equipment. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.

**PESTICIDE DISPOSAL:** Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for Guidance.

### CONTAINER HANDLING:

**NON-REFILLABLE-** Do not reuse or refill this container. Offer for recycling if available or place in trash. Cleaning the container according to label instructions before final disposal is the responsibility of the person disposing of the container.

**IN CASE OF FIRE:** Use water fog, foam, dry chemical powder, CO<sub>2</sub>. Avoid using water jet. Avoid ammonium compounds. Use standard firefighting procedures. Use water spray to cool surrounding containers.



ACTIVE INGREDIENT:	12.5%
Sodium Hypochlorite	
INERT INGREDIENTS:	87.5%
<hr/>	
TOTAL:	100%



D.O.T. HYPOCHLORITE SOLUTION  
8 (CORROSIVE MATERIAL)  
UN 1791 PG III  
RQ100  
CAS NO 7681-52-9

NET CONTENTS: \_\_\_\_\_

Keep vent end up  
do not roll